Prepared By

## COMSEARCH

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 http://www.comsearch.com

Prepared For
Intelsat License LLC
Hagerstown, Maryland
Temporary Transmit-Only Earth Station
Operation Dates: 06/01/2017-12/01/2017
Pursuant to Part 25.203(c) of the FCC Rules and Regulations, the satellite earth station proposed in this application was coordinated by Comsearch using computer techniques and in accordance with Part 25 of the FCC Rules and Regulations. Verbal and written coordination was conducted with the below listed carriers on February 9, 2017.

## Company

AT\&T Communications of Virginia, LLC
AT\&T Corp.
Adams County Department of Emergency Svc
Affiniti PA, LLC
Appalachia Engineering Services
Argos Engineering, LLC
Atlantic Broadband (Penn), LLC
BLAIR COUNTY 911
Baltimore County of Maryland
Baltimore Gas and Electric Company
Bedford County of
Believe Wireless, LLC
CNG Transmission Corporation
Capital Communications of America
Carroll, County of
Cellco Partnership-WDC/Baltimore
Cellco Prtnrshp - Phil. Tri-State Rgn
Charles, County of
Commonwealth of Pennsylvania-Radio Proj.
Comprehensive Wireless LLC
Conterra Ultra Broadband, LLC
County of Frederick
County of York
DAUPHIN COUNTY EMERGENCY MANAGEMENT
Delaware Division of Communications
ECW Wireless, LLC
Eastern MLG LLC
Enoch Pratt Free Library
Exelon Generation Company, LLC
FELHC, INC
Federal Communication Commission
Frederick County
Fulton County of (PA)
Fundamental Broadcasting LLC
Garden State Transmissions
HUNTINGDON COUNTY, PA

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Hardy Cellular Telephone Company
Hardy County OEM/E911
Juniata County Emergency Services
Lancaster County-Wide Communications
Loudoun, County of
Maryland Public Broadcasting Commission
Maryland State Highway Administration
Maryland, State of - Dept.of Info & Tech
New Cingular Wireless PCS - Maryland
New Cingular Wireless PCS LLC - DC
New Cingular Wireless PCS LLC - VA
New Cingular Wireless PCS LLC - WV,NC,SC
New Cingular Wireless PCS, LLC - PA
Norfolk Southern Railway
PA Communications
PRESTON COUNTY OFFICE OF EMERGENCY MANAG
Pennsylvania Turnpike Commission
Pepco Holdings Inc.
Perry, County of
Perseus Technology Holdings USA Inc.
Prince George's County
Prince William, County of
Radio One Inc
Rappahannock Electric Cooperative
SHENANDOAH VALLEY ELECTRIC COOPERATIVE
Shenandoah Personal Communications, LLC
Somerset, County of
South Central Task Force (SCTFNET)
State of Maryland, MIEMSS
T-Mobile License LLC
Texas Eastern Communications, LLC
Thought Transmissions, LLC
Transcontinental Gas Pipeline Corp.
US Cellular Operating Company, LLC (WI)
USCOC of Cumberland, Inc.
USOC of Pennsylvania RSA No 10 B2 Inc.
Uniti Fiber PEG, LLC
Verizon Wireless (VAW) LLC - Maryland
Verizon Wireless (VAW) LLC - W/B/V Mkts
Virginia Department of State Police
Virginia Electric & Power Company
WV DHHR BPH, Office of EMS, Com. Div.
Washington Gas Light Company
Washington Suburban Sanitary Commission
Webline Holdings LLC
World Class Wireless, LLC
YAB Mobile
iSignal
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There are no unresolved interference objections with the station contained in these applications.
The following section presents the data pertinent to frequency coordination of the earth station that was circulated to all carriers within its coordination contours.

## COMSEARCH

## Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 http://www.comsearch.com

| Date: | 02/08/2017 |
| :--- | :--- |
| Job Number: | 170209 COMSGE03 |


| Administrative Information |  |
| :---: | :---: |
| Status | TEMPORARY (Operation from 06/01/2017 to 12/01/2017) |
| Call Sign | TEMP12 |
| Licensee Code | INTELS |
| Licensee Name | Intelsat License LLC |
| Site Information | HAGERSTOWN, MD |
| Venue Name |  |
| Latitude (NAD 83) | $39^{\circ} 35^{\prime} 56.8^{\prime \prime} \mathrm{N}$ |
| Longitude (NAD 83) | 77 ${ }^{\circ} 45^{\prime} 23.0$ " W |
| Climate Zone | A |
| Rain Zone | 2 |
| Ground Elevation (AMSL) | $165.08 \mathrm{~m} / 541.6$ ft |
| Link Information |  |
| Satellite Type | Geostationary |
| Mode | TO - Transmit-Only |
| Modulation | Digital |
| Satellite Arc | $6^{\circ} \mathrm{W}$ to $149^{\circ} \mathrm{West}$ Longitude |
| Azimuth Range | $101.9^{\circ}$ to $257.8^{\circ}$ |
| Corresponding Elevation Angles | $5.3^{\circ} / 5.7^{\circ}$ |
| Antenna Centerline (AGL) | 6.1 m / 20.0 ft |


| Antenna Information |  | Transmit - FCC32 |
| :---: | :---: | :---: |
| Manufacturer |  | GD Satcom |
| Model |  | 9 Meter |
| Gain / Diameter |  | 53.7 dBi / 9.0 m |
| 3-dB / 15-dB Beamwidth |  | $0.35^{\circ} / 0.87^{\circ}$ |
| Max Available RF Power | (dBW/4 kHz) | -19.9 |
|  | (dBW/MHz) | 4.1 |
| Maximum EIRP | (dBW/4 kHz) | 33.8 |
|  | (dBW/MHz) | 57.8 |
| Interference Objectives: | Long Term | -154.0 dBW/4 kHz 20\% |
|  | Short Term | -131.0 dBW/4 kHz 0.0025\% |
| Frequency Information Emission / Frequency Range (MHz) |  | Transmit 6.1 GHz |
|  |  | 30M0G7W / 5925.0-6425.0 |
| Max Great Circle Coordination | Distance | 245.6 km / 152.6 mi |
| Precipitation Scatter Contour R | Radius | 100.0 km / 62.1 mi |


| Coordination ValuesLicensee Name |  | HAGERSTOWN, MD |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Intelsat License LLC |  |  |
| Latitude (NAD 83) |  | $39^{\circ} 35{ }^{\prime} 56.8^{\prime \prime} \mathrm{N}$ |  |  |
| Longitude (NAD 83) |  | $77^{\circ} 45^{\prime} 23.01 \mathrm{~W}$ |  |  |
| Ground Elevation (AMSL) |  | $165.08 \mathrm{~m} / 541.6 \mathrm{ft}$ |  |  |
| Antenna Centerline (AGL) |  | $6.1 \mathrm{~m} / 20.0 \mathrm{ft}$ |  |  |
| Antenna Model |  | GD Satcom 9 meter |  |  |
| Antenna Mode |  | Transmit 6.1 GHz |  |  |
| Interference Objectives: Long Term |  | -154.0 dBW/4 kHz 20\% |  |  |
| Max Available RF Power |  | -131.0 dBW/4 kHz 0.0025\% |  |  |
|  |  | -19.9 (dBW/4 |  |  |
|  |  |  | Trans | 6.1 GHz |
|  | Horizon | Antenna | Horizon | Coordination |
| Azimuth ( ${ }^{\circ}$ ) | Elevation ( ${ }^{\circ}$ ) | Discrimination ( ${ }^{\circ}$ ) | Gain (dBi) | Distance (km) |
| 0 | 0.33 | 101.82 | -10.00 | 107.01 |
| 5 | 0.55 | 96.84 | -10.00 | 100.00 |
| 10 | 0.45 | 91.86 | -10.00 | 100.00 |
| 15 | 0.34 | 86.88 | -10.00 | 106.14 |
| 20 | 0.30 | 81.90 | -10.00 | 109.23 |
| 25 | 0.30 | 76.92 | -10.00 | 109.03 |
| 30 | 0.30 | 71.94 | -10.00 | 109.05 |
| 35 | 0.27 | 66.96 | -10.00 | 112.06 |
| 40 | 0.43 | 61.98 | -10.00 | 100.00 |
| 45 | 0.52 | 57.00 | -10.00 | 100.00 |
| 50 | 0.29 | 52.04 | -10.00 | 109.79 |
| 55 | 0.36 | 47.07 | -9.82 | 104.69 |
| 60 | 0.23 | 42.12 | -8.61 | 118.68 |
| 65 | 0.26 | 37.16 | -7.25 | 119.79 |
| 70 | 0.23 | 32.23 | -5.71 | 126.32 |
| 75 | 0.25 | 27.30 | -3.91 | 128.94 |
| 80 | 0.24 | 22.42 | -1.76 | 134.74 |
| 85 | 0.28 | 17.58 | 0.88 | 138.98 |
| 90 | 0.00 | 12.98 | 4.17 | 157.51 |
| 95 | 0.00 | 8.67 | 8.55 | 175.92 |
| 100 | 0.00 | 5.62 | 13.26 | 245.65 |
| 105 | 0.00 | 6.15 | 12.28 | 195.27 |
| 110 | 0.00 | 9.60 | 7.45 | 171.62 |
| 115 | 0.00 | 13.27 | 3.93 | 156.64 |
| 120 | 0.00 | 16.89 | 1.31 | 147.63 |
| 125 | 0.00 | 20.41 | -0.75 | 141.12 |
| 130 | 0.00 | 23.83 | -2.43 | 136.19 |
| 135 | 0.00 | 27.11 | -3.83 | 133.58 |
| 140 | 0.00 | 30.23 | -5.01 | 130.41 |
| 145 | 0.00 | 33.14 | -6.01 | 127.75 |
| 150 | 0.00 | 35.82 | -6.85 | 125.52 |
| 155 | 0.00 | 38.20 | -7.55 | 123.68 |
| 160 | 0.00 | 40.26 | -8.12 | 122.19 |
| 165 | 0.00 | 41.93 | -8.56 | 121.04 |
| 170 | 0.00 | 43.16 | -8.88 | 120.22 |
| 175 | 0.00 | 43.92 | -9.07 | 119.73 |
| 180 | 0.00 | 44.18 | -9.13 | 119.57 |
| 185 | 0.00 | 43.92 | -9.07 | 119.73 |


| Coordination Values | HAGERSTOWN, MD <br> Licensee Name |
| :--- | :--- |
| Intelsat License LLC |  |



## Certification

I hereby certify that I am the technically qualified person responsible for the preparation of the frequency coordination data contained in this report. I am familiar with Parts 101 and 25 of the FCC Rules and Regulations and I have either prepared or reviewed the frequency coordination data submitted with this report, and that it is complete and correct to the best of my knowledge and belief.

BY:


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DATED: February 24, 2017

